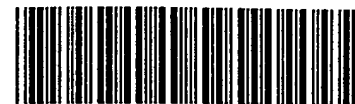# RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/664,422A

Source: _____ IFW16

Date Processed by STIC: _____ 06/08/2006

ENTERED

IFW16

```
         RAW SEQUENCE LISTING              DATE: 06/08/2006
         PATENT APPLICATION:  US/10/664,422A      TIME: 09:09:41

         Input Set : F:\GOUD023USD3.txt
         Output Set: N:\CRF4\06082006\J664422A.raw
```

```
 3 <110> APPLICANT: Rouleau, Guy A.
 4       Rochefort, Daniel
 5       Lafreniere, Ronald G.
 7 <120> TITLE OF INVENTION: LOCI FOR IDIOPATHIC GENERALIZED EPILEPSY, MUTATIONS THEREOF
AND
 8       METHODS USING SAME TO ASSESS, DIAGNOSE, PROGNOSE OR TREAT
 9       EPILEPSY
11 <130> FILE REFERENCE: GOUD:023USD3
13 <140> CURRENT APPLICATION NUMBER: 10/664,422A
14 <141> CURRENT FILING DATE: 2003-09-17
16 <150> PRIOR APPLICATION NUMBER: 09/718,355
17 <151> PRIOR FILING DATE: 2000-11-24
19 <150> PRIOR APPLICATION NUMBER: 60/167,623
20 <151> PRIOR FILING DATE: 1999-11-26
22 <160> NUMBER OF SEQ ID NOS: 408
24 <170> SOFTWARE: PatentIn version 3.2
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 8378
28 <212> TYPE: DNA
29 <213> ORGANISM: Homo sapiens
31 <400> SEQUENCE: 1
32 tactgcagag gtctctggtg catgtgtgta tgtgtgcgtt tgtgtgtgtt tgtgtgtctg      60
34 tgtgttctgc cccagtgaga ctgcagccct tgtaaatact ttgacacctt ttgcaagaag     120
36 gaatctgaac aattgcaact gaaggcacat tgttatcatc tcgtctttgg gtgatgctgt     180
38 tcctcactgc agatggataa ttttcctttt aatcaggaat ttcatatgca gaataaatgg     240
40 taattaaaat gtgcaggatg acaagatgga gcaaacagtg cttgtaccac caggacctga     300
42 cagcttcaac ttcttcacca gagaatctct tgcggctatt gaaagacgca ttgcagaaga     360
44 aaaggcaaag aatcccaaac cagacaaaaa agatgacgac gaaaatggcc caaagccaaa     420
46 tagtgacttg gaagctggaa agaaccttcc atttatttat ggagacattc ctccagagat     480
48 ggtgtcagag cccctggagg acctggaccc ctactatatc aataagaaaa cttttatagt     540
50 attgaataaa gggaaggcca tcttccggtt cagtgccacc tctgccctgt acattttaac     600
52 tcccttcaat cctcttagga aaatagctat taagattttg gtacattcat tattcagcat     660
54 gctaattatg tgcactattt tgacaaactg tgtgtttatg acaatgagta accctcctga     720
56 ttggacaaag aatgtagaat acaccttcac aggaatatat acttttgaat cacttataaa     780
58 aattattgca aggggattct gtttagaaga ttttactttc cttcgggatc catggaactg     840
60 gctcgatttc actgtcatta catttgcgta cgtcacagag tttgtggacc tgggcaatgt     900
62 ctcggcattg agaacattca gagttctccg agcattgaag acgatttcag tcattccagg     960
64 cctgaaaacc attgtgggag ccctgatcca gtctgtgaag aagctctcag atgtaatgat    1020
66 cctgactgtg ttctgtctga gcgtatttgc tctaattggg ctgcagctgt tcatgggcaa    1080
68 cctgaggaat aaatgtatac aatggcctcc caccaatgct tccttggagg aacatagtat    1140
70 agaaaagaat ataactgtga attataatgg tacacttata aatgaaactg tctttgagtt    1200
72 tgactggaag tcatatattc aagattcaag atatcattat ttcctggagg gttttttaga    1260
74 tgcactacta tgtggaaata gctctgatgc aggccaatgt ccagagggat atatgtgtgt    1320
76 gaaagctggt agaaatccca attatggcta cacaagcttt gataccttca gttgggcttt    1380
```

RAW SEQUENCE LISTING   DATE: 06/08/2006
PATENT APPLICATION: US/10/664,422A   TIME: 09:09:41

Input Set : F:\GOUD023USD3.txt
Output Set: N:\CRF4\06082006\J664422A.raw

```
 78 tttgtccttg tttcgactaa tgactcagga cttctgggaa aatctttatc aactgacatt   1440
 80 acgtgctgct gggaaaacgt acatgatatt ttttgtattg gtcattttct tgggctcatt   1500
 82 ctacctaata aatttgatcc tggctgtggt ggccatggcc tacgaggaac agaatcaggc   1560
 84 caccttggaa gaagcagaac agaaagaggc cgaatttcag cagatgattg aacagcttaa   1620
 86 aaagcaacag gaggcagctc agcaggcagc aacggcaact gcctcagaac attccagaga   1680
 88 gcccagtgca gcaggcaggc tctcagacag ctcatctgaa gcctctaagt tgagttccaa   1740
 90 gagtgctaag gaaagaagaa atcggaggaa gaaaagaaaa cagaaagagc agtctggtgg   1800
 92 ggaagagaaa gatgaggatg aattccaaaa atctgaatct gaggacagca tcaggaggaa   1860
 94 aggttttcgc ttctccattg aagggaaccg attgacatat gaaaagaggt actcctcccc   1920
 96 acaccagtct ttgttgagca tccgtggctc cctattttca ccaaggcgaa atagcagaac   1980
 98 aagccttttc agctttagag ggcgagcaaa ggatgtggga tctgagaacg acttcgcaga   2040
100 tgatgagcac agcacctttg aggataacga gagccgtaga gattccttgt ttgtgccccg   2100
102 acgacacgga gagagacgca acagcaacct gagtcagacc agtaggtcat cccggatgct   2160
104 ggcagtgttt ccagcgaatg ggaagatgca cagcactgtg gattgcaatg gtgtggtttc   2220
106 cttggttggt ggaccttcag ttcctacatc gcctgttgga cagcttctgc cagaggtgat   2280
108 aatagataag ccagctactg atgacaatgg aacaaccact gaaactgaaa tgagaaagag   2340
110 aaggtcaagt tctttccacg tttccatgga ctttctagaa gatccttccc aaaggcaacg   2400
112 agcaatgagt atagccagca ttctaacaaa tacagtagaa gaacttgaag aatccaggca   2460
114 gaaatgccca ccctgttggt ataaattttc caacatattc ttaatctggg actgttctcc   2520
116 atattggtta aaagtgaaac atgttgtcaa cctggttgtg atggacccat ttgttgacct   2580
118 ggccatcacc atctgtattg tcttaaatac tcttttcatg gccatggagc actatccaat   2640
120 gacggaccat ttcaataatg tgcttacagt aggaaacttg gttttcactg ggatctttac   2700
122 agcagaaatg tttctgaaaa ttattgccat ggatccttac tattatttcc aagaaggctg   2760
124 gaatatcttt gacggtttta ttgtgacgct tagcctggta gaacttggac tcgccaatgt   2820
126 ggaaggatta tctgttctcc gttcatttcg attgctgcga gtttttcaagt tggcaaaatc   2880
128 ttggccaacg ttaaatatgc taataaagat catcggcaat tccgtggggg ctctgggaaa   2940
130 tttaaccctc gtcttggcca tcatcgtctt cattttgccc gtggtcggca tgcagctctt   3000
132 tggtaaaagc tacaaagatt gtgtctgcaa gatcgccagt gattgtcaac tcccacgctg   3060
134 gcacatgaat gacttcttcc actccttcct gattgtgttc cgcgtgctgt gtggggagtg   3120
136 gatagagacc atgtgggact gtatggaggt tgctggtcaa gccatgtgcc ttactgtctt   3180
138 catgatggtc atggtgattg aaacctagt ggtcctgaat ctctttctgg ccttgcttct   3240
140 gagctcattt agtgcagaca accttgcagc cactgatgat gataatgaaa tgaataatct   3300
142 ccaaattgct gtggatagga tgcacaaagg agtagcttat gtgaaaagaa aaatatatga   3360
144 atttattcaa cagtccttca ttaggaaaca aaagatttta gatgaaatta aaccacttga   3420
146 tgatctaaac aacaagaaag acagttgtat gtccaatcat acagcagaaa ttgggaaaga   3480
148 tcttgactat cttaaagatg taaatggaac tacaagtggt ataggaactg gcagcagtgt   3540
150 tgaaaaatac attattgatg aaagtgatta catgtcattc ataaacaacc ccagtcttac   3600
152 tgtgactgta ccaattgctg taggagaatc tgactttgaa aatttaaaca cggaagactt   3660
154 tagtagtgaa tcggatctgg aagaaagcaa agagaaactg aatgaaagca gtagctcatc   3720
156 agaaggtagc actgtggaca tcggcgcacc tgtagaagaa cagcccgtag tggaacctga   3780
158 agaaactctt gaaccagaag cttgtttcac tgaaggctgt gtacaaagat tcaagtgttg   3840
160 tcaaatcaat gtggaagaag gcagaggaaa acaatggtgg aacctgagaa ggacgtgttt   3900
162 ccgaatagtt gaacataact ggtttgagac cttcattgtt ttcatgattc tccttagtag   3960
164 tggtgctcgg catttgaaga tatatatatt gatcagcgaa agacgattaa gacgatgttg   4020
166 gaatatgctg acaaggtttt cacttacatt ttcattctgg aaatgcttct aaaatgggtg   4080
168 gcatatggct atcaaacata tttcaccaat gcctggtgtt ggctggactt cttaattgtt   4140
170 gatgtttcat tggtcagttt aacagcaaat gccttgggtt actcagaact tggagccatc   4200
172 aaatctctca ggacactaag agctctgaga cctctaagag ccttatctcg atttgaaggg   4260
174 atgagggtgg ttgtgaatgc cctttagga gcaattccat ccatcatgaa tgtgcttctg   4320
```

RAW SEQUENCE LISTING   DATE: 06/08/2006
PATENT APPLICATION: US/10/664,422A   TIME: 09:09:41

        Input Set : F:\GOUD023USD3.txt
        Output Set: N:\CRF4\06082006\J664422A.raw

```
176 gtttgtctta tattctggct aattttcagc atcatgggcg taaatttgtt tgctggcaaa 4380
178 ttctaccact gtattaacac cacaactggt gacaggtttg acatcgaaga cgtgaataat 4440
180 catactgatt gcctaaaact aatagaaaga aatgagactg ctcgatggaa aaatgtgaaa 4500
182 gtaaactttg ataatgtagg atttgggtat ctctctttgc ttcaagttgc cacattcaaa 4560
184 ggatggatgg atataatgta tgcagcagtt gattccagaa atgtggaact ccagcctaag 4620
186 tatgaagaaa gtctgtacat gtatctttac tttgttattt tcatcatctt tgggtccttc 4680
188 ttcaccttga acctgtttat tggtgtcatc atagataatt tcaaccagca gaaaaagaag 4740
190 tttggaggtc aagacatctt tatgacagaa gaacagaaga aatactataa tgcaatgaaa 4800
192 aaattaggat cgaaaaaacc gcaaaagcct acctcgac caggaaacaa atttcaagga 4860
194 atggtctttg acttcgtaac cagacaagtt tttgacataa gcatcatgat tctcatctgt 4920
196 cttaacatgg tcacaatgat ggtggaaaca gatgaccaga gtgaatatgt gactaccatt 4980
198 ttgtcacgca tcaatctggt gttcattgtg ctatttactg gagagtgtgt actgaaactc 5040
200 atctctctac gccattatta ttttaccatt ggatggaata tttttgattt tgtggttgtc 5100
202 attctctcca ttgtaggtat gtttcttgcc gagctgatag aaaagtattt cgtgtccct 5160
204 accctgttcc gagtgatccg tcttgctagg attggccgaa tcctacgtct gatcaaagga 5220
206 gcaaagggga tccgcacgct gctctttgct ttgatgatgt cccttcctgc gttgtttaac 5280
208 atcggcctcc tactcttcct agtcatgttc atctacgcca tctttgggat gtccaacttt 5340
210 gcctatgtta agaggggaagt tgggatcgat gacatgttca actttgagac ctttggcaac 5400
212 agcatgatct gcctattcca aattacaacc tctgctggct gggatggatt gctagcaccc 5460
214 attctcaaca gtaagccacc cgactgtgac cctaataaag ttaaccctgg aagctcagtt 5520
216 aagggagact gtgggaaccc atctgttgga attttctttt ttgtcagtta catcatcata 5580
218 tccttcctgg ttgtggtgaa catgtacatc gcggtcatcc tggagaactt cagtgttgct 5640
220 actgaagaaa gtgcagagcc tctgagtgag gatgactttg agatgttcta tgaggtttgg 5700
222 gagaagtttg atcccgatgc aactcagttc atggaatttg aaaaattatc tcagtttgca 5760
224 gctgcgcttg aaccgcctct caatctgcca caaccaaaca aactccagct cattgccatg 5820
226 gatttgccca tggtgagtgg tgaccggatc cactgtcttg atatcttatt tgcttttaca 5880
228 aagcgggttc taggagagag tggagagatg gatgctctac gaatacagat ggaagagcga 5940
230 ttcatggctt ccaatccttc caaggtctcc tatcagccaa tcactactac tttaaaacga 6000
232 aaacaagagg aagtatctgc tgtcattatt cagcgtgctt acagacgcca ccttttaaag 6060
234 cgaactgtaa aacaagcttc ctttacgtac aataaaaaca aaatcaaagg tggggctaat 6120
236 cttcttataa aagaagacat gataattgac agaataaatg aaaactctat tacagaaaaa 6180
238 actgatctga ccatgtccac tgcagcttgt ccaccttcct atgaccgggt gacaaagcca 6240
240 attgtggaaa aacatgagca agaaggcaaa gatgaaaaag ccaaagggaa ataaatgaaa 6300
242 ataaataaaa ataattgggt gacaaattgt ttacagcctg tgaaggtgat gtattttttat 6360
244 caacaggact cctttaggag gtcaatgcca aactgactgt ttttacacaa atctccttaa 6420
246 ggtcagtgcc tacaataaga cagtgacccc ttgtcagcaa actgtgactc tgtgtaaagg 6480
248 ggagatgacc ttgacaggag gttactgttc tcactaccag ctgacactgc tgaagataag 6540
250 atgcacaatg gctagtcaga ctgtagggac cagtttcaag gggtgcaaac ctgtgatttt 6600
252 ggggttgttt aacatgaaac actttagtgt agtaattgta tccactgttt gcatttcaac 6660
254 tgccacattt gtcacatttt tatggaatct gttagtggat tcatcttttt gttaatccat 6720
256 gtgtttatta tatgtgacta tttttgtaaa cgaagtttct gttgagaaat aggctaagga 6780
258 cctctataac aggtatgcca cctgggggggt atggcaacca catggccctc ccagctacac 6840
260 aaagtcgtgg tttgcatgag ggcatgctgc acttagagat catgcatgag aaaaagtcac 6900
262 aagaaaaaca aattcttaaa tttcaccata tttctgggag gggtaattgg gtgataagtg 6960
264 gaggtgcttt gttgatcttg ttttgcgaaa tccagcccct agaccaagta gattatttgt 7020
266 gggtaggcca gtaaatctta gcaggtgcaa acttcattca aatgtttgga gtcataaatg 7080
268 ttatgtttct ttttgttgta ttaaaaaaaa aacctgaata gtgaatattg cccctcaccc 7140
270 tccaccgcca gaagactgaa ttgaccaaaa ttactcttta taaatttctg ctttttcctg 7200
272 cactttgttt agccatcttc ggctctcagc aaggttgaca ctgtatatgt taatgaaatg 7260
```

```
274 ctatttatta tgtaaatagt catttaccc tgtggtgcac gtttgagcaa acaaataatg   7320
276 acctaagcac agtatttatt gcatcaaata tgtaccacaa gaaatgtaga gtgcaagctt   7380
278 tacacaggta ataaaatgta ttctgtacca tttatagata gtttggatgc tatcaatgca   7440
280 tgtttatatt accatgctgc tgtatctggt ttctctcact gctcagaatc tcatttatga   7500
282 gaaaccatat gtcagtggta aagtcaagga aattgttcaa cagatctcat ttatttaagt   7560
284 cattaagcaa tagtttgcag cactttaaca gcttttttggt tattttttaca ttttaagtgg   7620
286 ataacatatg gtatatagcc agactgtaca gacatgttta aaaaaacaca ctgcttaacc   7680
288 tattaaatat gtgtttagaa ttttataagc aaatataaat actgtaaaaa gtcactttat   7740
290 tttattttttc agcattatgt acataaatat gaagaggaaa ttatcttcag gttgatatca   7800
292 caatcacttt tcttactttc tgtccatagt acttttttcat gaaagaaatt tgctaaataa   7860
294 gacatgaaaa caagactggg tagttgtaga tttctgcttt ttaaattaca tttgctaatt   7920
296 ttagattatt tcacaatttt aaggagcaaa ataggttcac gattcatatc caaattatgc   7980
298 tttgcaattg gaaaagggtt taaaatttta tttatatttc tggtagtacc tgcactaact   8040
300 gaattgaagg tagtgcttat gttattttttg ttctttttttt ctgacttcgg tttatgtttt   8100
302 catttctttg gagtaatgct gctctagttg ttctaaatag aatgtgggct tcataatttt   8160
304 ttttccaca aaaacagagt agtcaactta tatagtcaat tacatcagga catttgtgt   8220
306 ttcttacaga agcaaaccat aggctcctct tttccttaaa actacttaga taaactgtat   8280
308 tcgtgaactg catgctggaa aatgctacta ttatgctaaa taatgctaac caacatttaa   8340
310 aatgtgcaaa actaataaag attacatttt ttattttta                          8378
313 <210> SEQ ID NO: 2
314 <211> LENGTH: 8378
315 <212> TYPE: DNA
316 <213> ORGANISM: Homo sapiens
318 <400> SEQUENCE: 2
319 tactgcagag gtctctggtg catgtgtgta tgtgtgcgtt tgtgtgtgtt tgtgtgtctg     60
321 tgtgttctgc cccagtgaga ctgcagccct tgtaaatact ttgacacctt ttgcaagaag    120
323 gaatctgaac aattgcaact gaaggcacat tgttatcatc tcgtctttgg gtgatgctgt    180
325 tcctcactgc agatggataa ttttcctttt aatcaggaat ttcatatgca gaataaatgg    240
327 taattaaaat gtgcaggatg acaagatgga gcaaacagtg cttgtaccac caggacctga    300
329 cagcttcaac ttcttcacca gagaatctct tgcggctatt gaaagacgca ttgcagaaga    360
331 aaaggcaaag aatcccaaac cagacaaaaa agatgacgac gaaaatggcc caaagccaaa    420
333 tagtgacttg gaagctggaa agaaccttcc atttatttat ggagacattc ctccagagat    480
335 ggtgtcagag cccctggagg acctggaccc ctactatatc aataagaaaa cttttatagt    540
337 attgaataaa gggaaggcca tcttccggtt cagtgccacc tctgccctgt acattttaac    600
339 tcccttcaat cctcttagga aaatagctat taagattttg gtacattcat tattcagcat    660
341 gctaattatg tgcactattt tgacaaactg tgtgtttatg acaatgagta accctcctga    720
343 ttggacaaag aatgtagaat acaccttcac aggaatatat acttttgaat cacttataaa    780
345 aattattgca aggggattct gtttagaaga ttttactttc cttcgggatc catggaactg    840
347 gctcgatttc actgtcatta catttgcgtt tgtaacagaa tttgtaaacc taggcaattt    900
349 ttcagctctt cgcactttca gagtcttgag agctttgaaa actatttcgg taattccagg    960
351 cctgaaaacc attgtgggag ccctgatcca gtctgtgaag aagctctcag atgtaatgat   1020
353 cctgactgtg ttctgtctga gcgtatttgc tctaattggg ctgcagctgt tcatgggcaa   1080
355 cctgaggaat aaatgtatac aatggcctcc caccaatgct tccttggagg aacatagtat   1140
357 agaaaagaat ataactgtga attataatgg tacacttata aatgaaactg tctttgagtt   1200
359 tgactggaag tcatatattc aagattcaag atatcattat ttcctggagg gttttttaga   1260
361 tgcactacta tgtggaaata gctctgatgc aggccaatgt ccagagggat atatgtgtgt   1320
363 gaaagctggt agaaatccca attatggcta cacaagcttt gataccttca gttgggcttt   1380
365 tttgtccttg tttcgactaa tgactcagga cttctgggaa aatctttatc aactgacatt   1440
367 acgtgctgct gggaaaacgt acatgatatt ttttgtattg gtcatttttct tgggctcatt   1500
```

```
369 ctacctaata aatttgatcc tggctgtggt ggccatggcc tacgaggaac agaatcaggc 1560
371 caccttggaa gaagcagaac agaaagaggc cgaatttcag cagatgattg aacagcttaa 1620
373 aaagcaacag gaggcagctc agcaggcagc aacggcaact gcctcagaac attccagaga 1680
375 gcccagtgca gcaggcaggc tctcagacag ctcatctgaa gcctctaagt tgagttccaa 1740
377 gagtgctaag gaaagaagaa atcggaggaa gaaaagaaaa cagaaagagc agtctggtgg 1800
379 ggaagagaaa gatgaggatg aattccaaaa atctgaatct gaggacagca tcaggaggaa 1860
381 aggttttcgc ttctccattg aagggaaccg attgacatat gaaaagaggt actcctcccc 1920
383 acaccagtct ttgttgagca tccgtggctc cctattttca ccaaggcgaa atagcagaac 1980
385 aagccttttc agctttagag ggcgagcaaa ggatgtggga tctgagaacg acttcgcaga 2040
387 tgatgagcca gcacctttga ggataacgag agccgtagag attccttgtt tgtgccccga 2100
389 cgacacggag agagacgcaa cagcaacctg agtcagacca gtaggtcatc ccggatgctg 2160
391 gcagtgtttc cagcgaatgg gaagatgcac agcactgtgg attgcaatgg tgtggtttcc 2220
393 ttggttggtg gaccttcagt tcctacatcg cctgttggac agcttctgcc agaggtgata 2280
395 atagataagc cagctactga tgacaatgga acaaccactg aaactgaaat gagaaagaga 2340
397 aggtcaagtt ctttccacgt ttccatggac tttctagaag atccttccca aaggcaacga 2400
399 gcaatgagta tagccagcat tctaacaaat acagtagaag aacttgaaga atccaggcag 2460
401 aaatgcccac cctgttggta taaattttcc aacatattct taatctggga ctgttctcca 2520
403 tattggttaa aagtgaaaca tgttgtcaac ctggttgtga tggacccatt tgttgacctg 2580
405 gccatcacca tctgtattgt cttaaatact cttttcatgg ccatggagca ctatccaatg 2640
407 acggaccatt tcaataatgt gcttacagta ggaaacttgg ttttcactgg gatctttaca 2700
409 gcagaaatgt ttctgaaaat tattgccatg gatccttact attatttcca agaaggctgg 2760
411 aatatctttg acggttttat tgtgacgctt agcctggtag aacttggact cgccaatgtg 2820
413 gaaggattat ctgttctccg ttcatttcga ttgctgcgag ttttcaagtt ggcaaaatct 2880
415 tggccaacgt taaatatgct aataaagatc atcggcaatt ccgtgggggc tctgggaaat 2940
417 ttaaccctcg tcttggccat catcgtcttc attttgccg tggtcggcat gcagctcttt 3000
419 ggtaaaagct acaaagattg tgtctgcaag atcgccagtg attgtcaact cccacgctgg 3060
421 cacatgaatg acttcttcca ctccttcctg attgtgttcc gcgtgctgtg tggggagtgg 3120
423 atagagacca tgtgggactg tatggaggtt gctggtcaag ccatgtgcct tactgtcttc 3180
425 atgatggtca tggtgattgg aaacctagtg gtcctgaatc tctttctggc cttgcttctg 3240
427 agctcattta gtgcagacaa ccttgcagcc actgatgatg ataatgaaat gaataatctc 3300
429 caaattgctg tggataggat gcacaaagga gtagcttatg tgaaaagaaa aatatatgaa 3360
431 tttattcaac agtccttcat taggaaacaa aagattttag atgaaattaa accacttgat 3420
433 gatctaaaca acaagaaaga cagttgtatg tccaatcata cagcagaaat tgggaaagat 3480
435 cttgactatc ttaaagatgt aaatggaact acaagtggta taggaactgg cagcagtgtt 3540
437 gaaaaataca ttattgatga aagtgattac atgtcattca taaacaaccc cagtcttact 3600
439 gtgactgtac caattgctgt aggagaatct gactttgaaa atttaaacac ggaagacttt 3660
441 agtagtgaat cggatctgga agaaagcaaa gagaaactga atgaaagcag tagctcatca 3720
443 gaaggtagca ctgtggacat cggcgcacct gtagaagaac agcccgtagt ggaacctgaa 3780
445 gaaactcttg aaccagaagc ttgtttcact gaaggctgtg tacaaagatt caagtgttgt 3840
447 caaatcaatg tggaagaagg cagaggaaaa caatggtgga acctgagaag gacgtgtttc 3900
449 cgaatagttg aacataactg gtttgagacc ttcattgttt tcatgattct ccttagtagt 3960
451 ggtgctctgg catttgaaga tatatatatt gatcagcgaa agacgattaa gacgatgttg 4020
453 gaatatgctg acaaggtttt cacttacatt ttcattctgg aaatgcttct aaaatgggtg 4080
455 gcatatggct atcaaaatat ttcaccaatg cctggtgttg ctggacttc ttaattgttg 4140
457 atgtttcatt ggtcagttta acagcaaatg ccttgggtta ctcagaactt ggagccatca 4200
459 aatctctcag gacactaaga gctctgagac ctctaagagc cttatctcga tttgaaggga 4260
461 tgagggtggt tgtgaatgcc ctttaggag caattccatc catcatgaat gtgcttctgg 4320
463 tttgtcttat attctggcta attttcagca tcatgggcgt aaatttgttt gctggcaaat 4380
465 tctaccactg tattaacacc acaactggtg acaggtttga catcgaagac gtgaataatc 4440
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 06/08/2006
PATENT APPLICATION: US/10/664,422A   TIME: 09:09:42

Input Set : **F:\GOUD023USD3.txt**
Output Set: **N:\CRF4\06082006\J664422A.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:23; N Pos. 393,415,454,513
Seq#:29; N Pos. 43
Seq#:41; N Pos. 293
Seq#:42; N Pos. 133
Seq#:44; N Pos. 229
Seq#:48; N Pos. 164
Seq#:55; N Pos. 90,378,379,380,381,382,383,384,385,386
Seq#:67; Xaa Pos. 122
Seq#:68; Xaa Pos. 122
Seq#:84; N Pos. 477

VERIFICATION SUMMARY   DATE: 06/08/2006
PATENT APPLICATION: **US/10/664,422A**   TIME: 09:09:42

Input Set : **F:\GOUD023USD3.txt**
Output Set: **N:\CRF4\06082006\J664422A.raw**

```
L:2201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:360
M:341 Repeated in SeqNo=23
L:2351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:4305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:240
L:4328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:120
L:4378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:180
L:4498 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:120
L:4728 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:60
M:341 Repeated in SeqNo=55
L:5743 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:112
L:6260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:112
L:7199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:420
```